

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended) A fuel injection system, comprising:

a fuel tank;

an electronically controlled fuel injection apparatus which is located above said fuel tank;

a fuel reservoir chamber which is located above said electronically controlled fuel injection apparatus;

a fuel introduction passage which connects said fuel tank and said fuel reservoir chamber;

a fuel pump which introduces fuel from said fuel tank to said fuel reservoir chamber via said fuel introduction passage;

a first fuel return passage which connects said fuel reservoir chamber and said fuel tank, and returns fuel overflowing from said fuel reservoir chamber and vapor to said fuel tank, said first fuel return passage connecting with said fuel reservoir chamber at a first connecting position;

a fuel supply passage which connects said fuel reservoir chamber and said electronically controlled fuel injection apparatus;

a filter arranged upstream of said electronically controlled fuel injection apparatus in ~~one of~~ said fuel supply passage ~~and said fuel reservoir chamber~~ for eliminating vapor from fuel passing through said fuel supply passage prior to entry of the fuel into said electronically controlled fuel injection apparatus; and

a second fuel return passage connecting said electronically controlled fuel injection apparatus with ~~one of~~ said fuel reservoir chamber ~~and said first fuel return passage~~, said second fuel return passage having a portion disposed higher than said first connecting position .

Claim 2 (Previously presented) The fuel injection system according to claim 1, wherein

said filter has an inner space formed therein;

a branch passage branches from some midpoint of said second fuel return passage at a branching position disposed below said first connecting position ; and

said branch passage and said fuel supply passage are connected with said inner space of said filter, and said branch passage is horizontal or declined from said branching position at which said branch passage connects towards a second connecting position with said inner space of said filter.

Claim 3 (Previously presented) The fuel injection system according to claim 2, wherein in a route from said branching position through said branch passage and said inner space of said filter to third connecting position at which said inner space connects with said fuel supply passage on a downstream side of said filter, said branching position is the highest position, and said third connecting position is the lowest position; and

said route from said branching position to said third connecting position does not have a portion that declines in a direction from said branching position toward said third connecting position .

Claim 4 (Previously presented) The fuel injection system according to claim 2, wherein an inner diameter of said second fuel return passage above said branching position is equal to or larger than 12 millimeters.

Claim 5 (Previously presented) The fuel injection system according to claim 4, wherein an inner diameter of said second fuel return passage below said branching position is smaller than the inner diameter of said second fuel return passage above said branching position.

Claim 6 (Previously presented) The fuel injection system according to claim 1, wherein a filter which does not allow foreign particles to pass through but allows vapor to pass through is disposed at said second fuel return passage above said first connecting position .

Claim 7 (Currently Amended) The fuel injection system according to claim ~~4~~ 15, wherein said fuel supply passage projects above a fuel level location in said fuel reservoir chamber, said fuel supply passage includes an opening that opens into said fuel reservoir chamber above the fuel level location, said fuel supply passage includes a fuel inlet opening which opens into a said fuel reservoir chamber below the fuel level location , and said fuel inlet opening is covered by ~~a~~ said filter.

Claim 8 (Previously presented) The fuel injection system according to claim 7, wherein a filter which does not allow foreign particles to pass through but allows vapor to pass through is attached to

said opening of said fuel supply passage that opens into said fuel reservoir chamber above the fuel level location.

Claim 9 (New) A fuel injection system, comprising:

a fuel tank;

an electronically controlled fuel injection apparatus which is located above said fuel tank;

a fuel reservoir chamber which is located above said electronically controlled fuel injection apparatus;

a fuel introduction passage which connects said fuel tank and said fuel reservoir chamber;

a fuel pump which introduces fuel from said fuel tank to said fuel reservoir chamber via said fuel introduction passage;

a first fuel return passage which connects said fuel reservoir chamber and said fuel tank, and returns fuel overflowing from said fuel reservoir chamber and vapor to said fuel tank, said first fuel return passage connecting with said fuel reservoir chamber at a first connecting position;

a fuel supply passage which connects said fuel reservoir chamber and said electronically controlled fuel injection apparatus;

a filter arranged upstream of said electronically controlled fuel injection apparatus in said fuel supply passage for eliminating vapor from fuel passing through said fuel supply passage prior to entry of the fuel into said electronically controlled fuel injection apparatus; and

a second fuel return passage connecting said electronically controlled fuel injection apparatus with said first fuel return passage, said second fuel return passage having a portion disposed higher than said first connecting position .

Claim 10 (New) The fuel injection system according to claim 9, wherein

said filter has an inner space formed therein;

a branch passage branches from some midpoint of said second fuel return passage at a branching position disposed below said first connecting position ; and

said branch passage and said fuel supply passage are connected with said inner space of said filter, and said branch passage is horizontal or declined from said branching position at which said branch passage connects towards a second connecting position with said inner space of said filter.

Claim 11 (New) The fuel injection system according to claim 10, wherein
in a route from said branching position through said branch passage and said inner space of said filter to third connecting position at which said inner space connects with said fuel supply passage on a downstream side of said filter, said branching position is the highest position, and said third connecting position is the lowest position; and
said route from said branching position to said third connecting position does not have a portion that declines in a direction from said branching position toward said third connecting position .

Claim 12 (New) The fuel injection system according to claim 10, wherein an inner diameter of said second fuel return passage above said branching position is equal to or larger than 12 millimeters.

Claim 13 (New) The fuel injection system according to claim 12, wherein an inner diameter of said second fuel return passage below said branching position is smaller than the inner diameter of said second fuel return passage above said branching position.

Claim 14 (New) The fuel injection system according to claim 9, wherein a filter which does not allow foreign particles to pass through but allows vapor to pass through is disposed at said second fuel return passage above said first connecting position .

Claim 15 (New) A fuel injection system, comprising:
a fuel tank;
an electronically controlled fuel injection apparatus which is located above said fuel tank;
a fuel reservoir chamber which is located above said electronically controlled fuel injection apparatus;
a fuel introduction passage which connects said fuel tank and said fuel reservoir chamber;
a fuel pump which introduces fuel from said fuel tank to said fuel reservoir chamber via said fuel introduction passage;

a first fuel return passage which connects said fuel reservoir chamber and said fuel tank, and returns fuel overflowing from said fuel reservoir chamber and vapor to said fuel tank, said first fuel return passage connecting with said fuel reservoir chamber at a first connecting position;

a fuel supply passage which connects said fuel reservoir chamber and said electronically controlled fuel injection apparatus;

a filter arranged upstream of said electronically controlled fuel injection apparatus in said fuel reservoir chamber for eliminating vapor from fuel passing through said fuel supply passage prior to entry of the fuel into said electronically controlled fuel injection apparatus; and

a second fuel return passage connecting said electronically controlled fuel injection apparatus with said fuel reservoir chamber, said second fuel return passage having a portion disposed higher than said first connecting position .

Claim 16 (New) The fuel injection system according to claim 15, wherein a filter which does not allow foreign particles to pass through but allows vapor to pass through is disposed at said second fuel return passage above said first connecting position .

Claim 17 (New) A fuel injection system, comprising:

a fuel tank;

an electronically controlled fuel injection apparatus which is located above said fuel tank;

a fuel reservoir chamber which is located above said electronically controlled fuel injection apparatus;

a fuel introduction passage which connects said fuel tank and said fuel reservoir chamber;

a fuel pump which introduces fuel from said fuel tank to said fuel reservoir chamber via said fuel introduction passage;

a first fuel return passage which connects said fuel reservoir chamber and said fuel tank, and returns fuel overflowing from said fuel reservoir chamber and vapor to said fuel tank, said first fuel return passage connecting with said fuel reservoir chamber at a first connecting position;

a fuel supply passage which connects said fuel reservoir chamber and said electronically controlled fuel injection apparatus;

a filter arranged upstream of said electronically controlled fuel injection apparatus in said fuel reservoir chamber for eliminating vapor from fuel passing through said fuel supply passage prior to entry of the fuel into said electronically controlled fuel injection apparatus; and

a second fuel return passage connecting said electronically controlled fuel injection apparatus with said first fuel return passage, said second fuel return passage having a portion disposed higher than said first connecting position .

Claim 18 (New) The fuel injection system according to claim 17, wherein a filter which does not allow foreign particles to pass through but allows vapor to pass through is disposed at said second fuel return passage above said first connecting position.

Claim 19 (New) The fuel injection system according to claim 17, wherein said fuel supply passage projects above a fuel level location in said fuel reservoir chamber, said fuel supply passage includes an opening that opens into said fuel reservoir chamber above the fuel level location, said fuel supply passage includes a fuel inlet opening which opens into a said fuel reservoir chamber below the fuel level location, and said fuel inlet opening is covered by said filter.

Claim 20 (New) The fuel injection system according to claim 19, wherein a filter which does not allow foreign particles to pass through but allows vapor to pass through is attached to said opening of said fuel supply passage that opens into said fuel reservoir chamber above the fuel level location.